

AMENDMENTS TO THE SPECIFICATION

Please add the following new paragraphs [18A], [18B], [18C] and [18D] after paragraph [18]:

[0018A] According to one embodiment of the invention, a visualization system for a computer system comprises a positioning portion configured to determine a position of a viewer with respect to a real world and a position of the viewer with respect to a virtual world. The positioning portion is also configured to allow the viewer to interact with the virtual world. The system further comprises a modeling portion configured to specify the virtual world in response to a model of the virtual world and a model specification portion configured to specify a representation of satellite status data in response to the position of the viewer with respect to the virtual world and in response to satellite status data. The system also comprises an output portion configured to provide an image of the virtual world super-imposed on an image of the real world. The image of the virtual world includes the representation of the satellite status data to the viewer in response to the position of the viewer with respect to the virtual world.

[0018B] According to one aspect of the invention, a method for visualization of augmented reality comprises: determining a position of a viewer with respect to a real world and a position of the viewer with respect to a virtual world; determining a model of the virtual world; determining a representation of satellite status data in response to the position of the viewer with respect to the virtual world and in response to satellite status data; and displaying to the viewer a representation of the virtual world super-imposed on a representation of the real world. The representation of the

virtual world includes the representation of the satellite status data in response to the position of the viewer with respect to the virtual world.

[0018C] According to another aspect of the invention, a visualization method for a computer system comprises: displaying to a viewer a representation of a real world overlaid with a representation of a virtual world. The representation of the virtual world includes satellite status data. In addition, the representation of the virtual world is determined in response to a model of the virtual world, and in response to a position of the viewer with respect to the virtual world. The representation of the satellite status data is determined in response to satellite status data, and in response to a position of the viewer with respect to the virtual world. Furthermore, the viewer is allowed to interact with the virtual world.

[0018D] According to one embodiment of the invention, a visualization system for a computer system comprises a positioning portion configured to determine a position of a viewer with respect a real world and a position of the viewer with respect to a virtual world. The positioning portion is also configured to allow the viewer to interact with the virtual world. The system further comprises a modeling portion configured to specify the virtual world in response to a model of the virtual world and a model specification portion configured to specify a representation of object status data in response to the position of the viewer with respect to the virtual world and in response to the object status data. The system also comprises an output portion configured to provide an image of the virtual world super-imposed on an image of the real world. The image of the virtual world includes the representation of the object status data to the viewer in response to the position of the viewer with respect to the virtual world.

Please replace paragraphs [11] and [12] with the following amended paragraphs:

[0011] In embodiments of the present invention, each user is typically fitted with a video camera on a pair of heads-up glasses. The video camera image is used by the system to capture images of a real-world stage. The ~~real-word~~ real-world stage is fitted with special pre-defined visual markers. Using image recognition software, the orientation of the user with respect to the real-world stage can be determined. Next, using a modeling software, the system specifies and constructs three-dimensional images of a view of a virtual world desired. The three-dimensional images are then projected to the user who wears the heads-up glasses. To the user, the net effect is similar to a hologram floating on top of the real-world stage. Additional data may be projected to the user via the heads-up glasses, including satellite data, or other status data, such as time, orientation, longitude and latitude lines, and the like. In other embodiments, the images provide the user with a two-dimensional image.

[0012] In additional embodiments, users can manipulate markers or paddles that include pre-defined visual markers. These paddles are recognized by the system, and thus the position of the paddles within the real-world stage is also determined. This real-world stage position is then translated into ~~to~~ the virtual world, allowing the user to interact with the virtual world. This interaction may include selecting satellites, selecting orbits, selecting geographic areas, zooming-in and out of the three dimensional world, and the like.